Developer forum

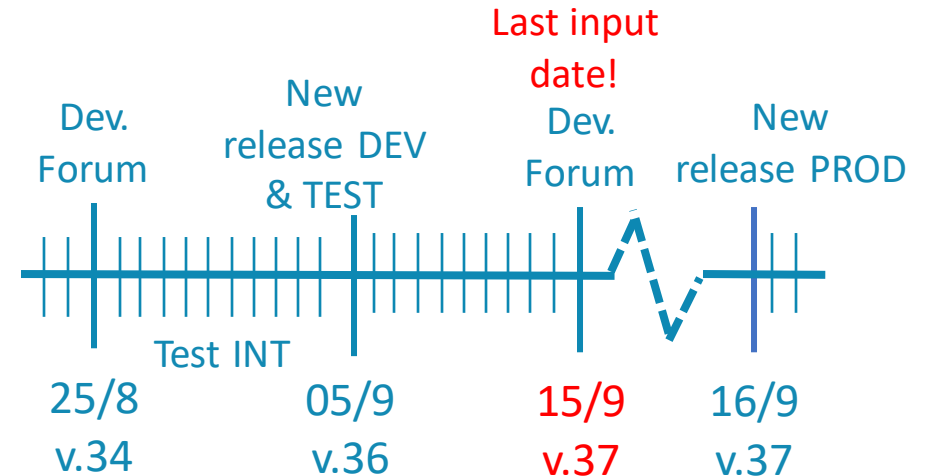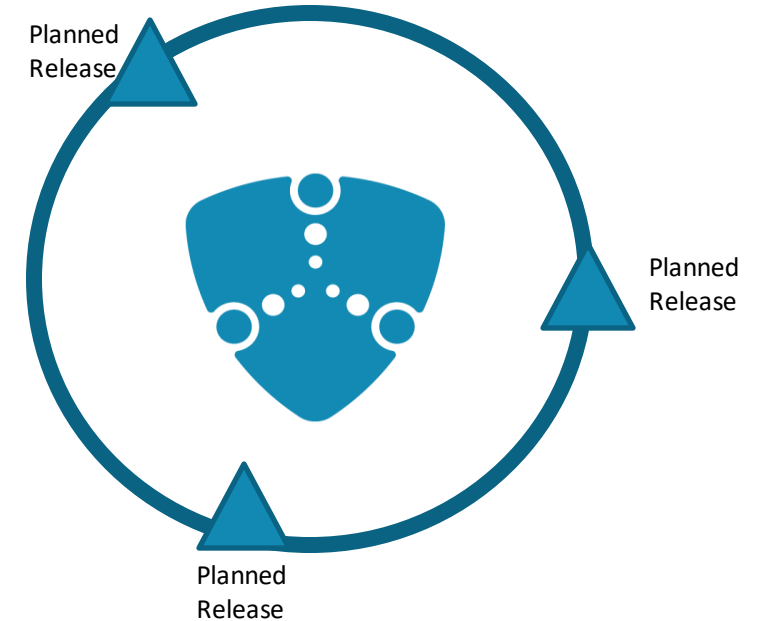25-08-2022

Navelink.org

Agenda

1) Navelink Platform status & update
   a) Received questions

2) Navelink Roadmap   (Head of concept Navelink)

3) Service development discussions & information
   a) Forum service developers   (Each developer)
   b) Forum security and interoperability   (Each developer)
   c) Ongoing work within the STM-community (Trello)   (Each developer)

4) Overview of Navelink usage

5) Update of G1128 Service Documentation schemas

6) Q&A
   a) New questions   (All)
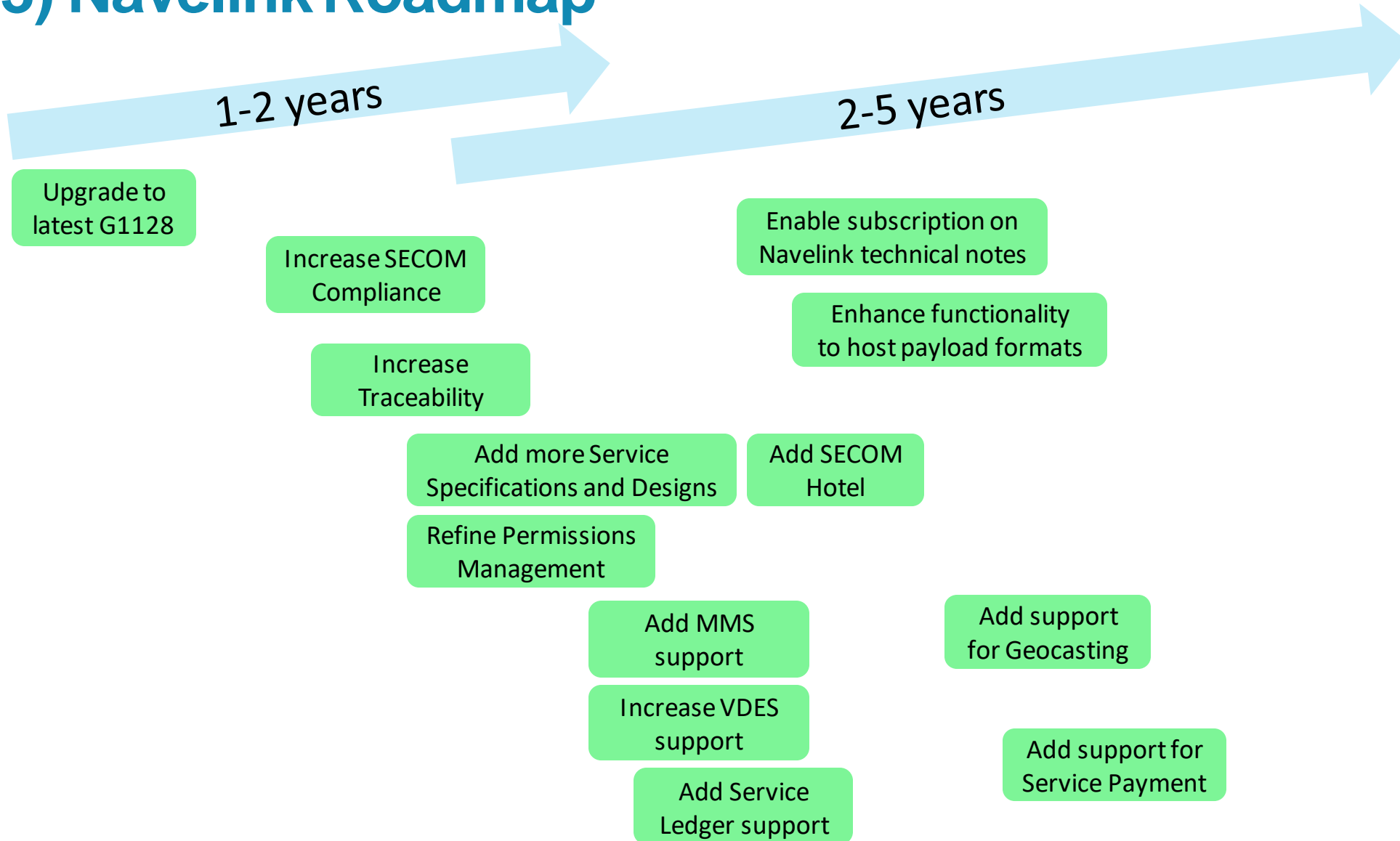
7) Closing remarks

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2) Navelink Platform status & update

- New MCP version on DEV and TEST on 5:th Sept.

  – Implementation to PROD/Operational planned v.37, 16/9

  – No great change for users, more back-end

    • Java 11 and Java 17 instead of Java 8

    • New version of the Keycloak subsystem

    • See MIR version 1.1.0 release notes for specifics

  – Dates, more information & release notes will be posted on Navelink.org

    • Note that the MIR, MSR and Portal have individual version numbers for releases and the complete Navelink platform has another. See webportal 'About' page

- System management phase

Received questions

Planned Release

Planned Release

Planned Release

Last input date!

Dev. Forum	New release DEV & TEST	Dev. Forum	New release PROD

Test INT

25/8	05/9	15/9	16/9
v.34	v.36	v.37	v.37

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3) Navelink Roadmap

1-2 years

2-5 years

Upgrade to latest G1128

Increase SECOM Compliance

Increase Traceability

Enable subscription on Navelink technical notes

Enhance functionality to host payload formats

Add more Service Specifications and Designs

Add SECOM Hotel

Refine Permissions Management

Add MMS support

Add support for Geocasting

Increase VDES support

Add Service Ledger support

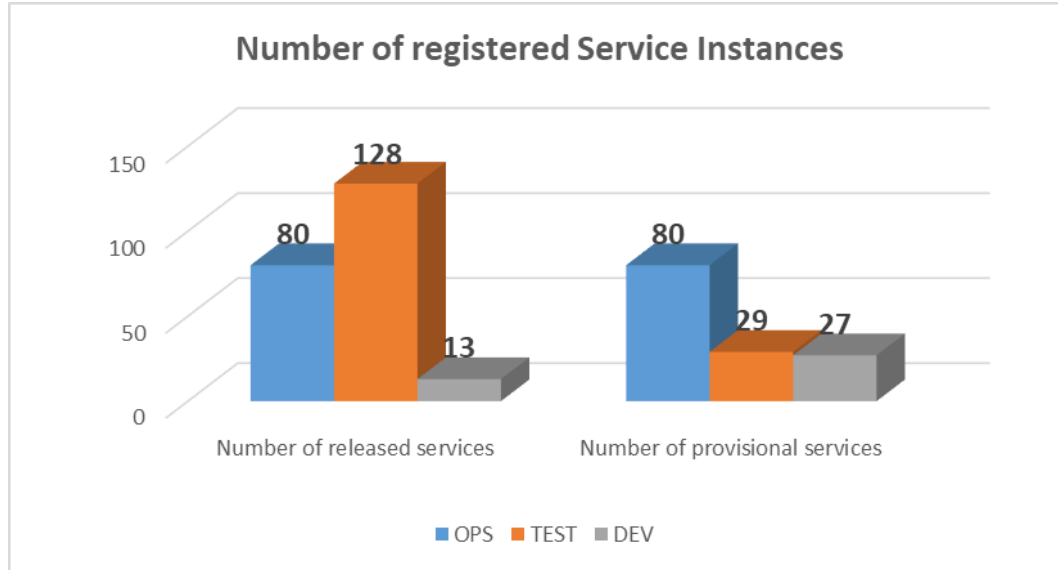Add support for Service Payment

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Service development discussions & information

- Forum service developers
  - Common discussions

- Forum Security and interoperability
  - Common discussions

- Ongoing work within the STM-community (Trello)
  - Trello check
  - Common standardization work: S-124, S-421, SECOM, General STM news
  - Update from Per Löfbom SMA regarding S-124

Overview on Navelink usage

2022-08-24

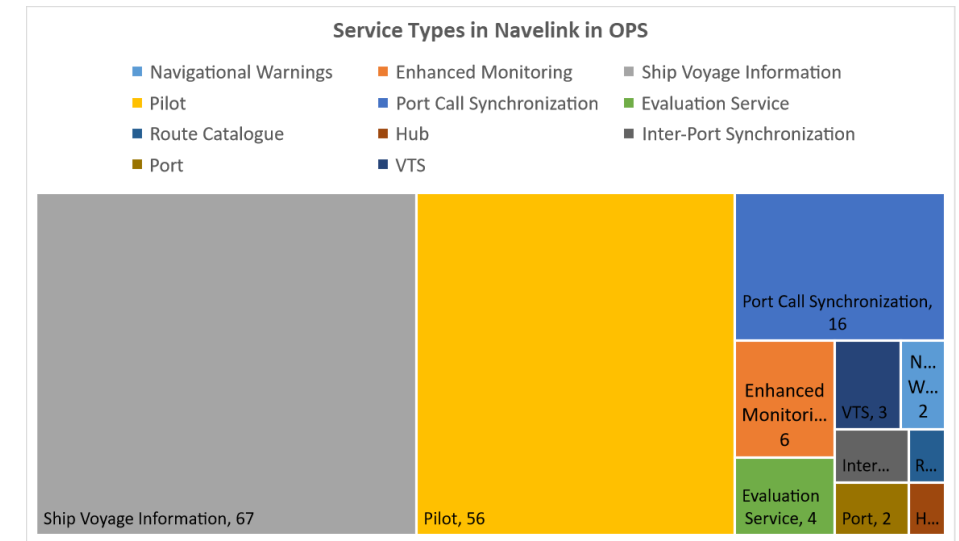**Number of registered Service Instances**

Navelink Operational environment Service Registrations

Service Specifications: 1 (Voyage Information Service v2.2)
Service Technical Design: 1 (Voyage Information Service Design v2.2)
Service Instances: 159

Service Types in Navelink in OPS

- Navigational Warnings
- Enhanced Monitoring
- Ship Voyage Information
- Pilot
- Port Call Synchronization
- Evaluation Service
- Route Catalogue
- Hub
- Inter-Port Synchronization
- Port
- VTS

Events since last Dev Forum:
- 1 released and 2 provisional new services TEST

Update of G1128 Service Documentation schemas

https://www.iala-aism.org/product/g1128/

The IALA G1128 contains guidelines/specifications for documentation and description of services. It contains both textual documentation, document templates and XML schemas for describing services in the 3 defined levels; Specification, Design and Instance.

In Navelink, the data model in Service Registry is based on G1128 XML schemas with some complementary attributes. Creating and registering a new service in Navelink Service Registry is mainly done by uploading an XML describing the service. This XML shall follow the G1128 XML Schema (XSD).

Current version in Navelink is G1128 v1 schemas. In next release of Navelink, the v1.3 of G1128 will also be allowed to use for registration of services, and later the v1 will be deprecated/deleted in Navelink.

Changes in Navelink after update:
• Service Specification as XML need to be updated (reference to dataModel changed)
• No difference in Design
• Instance backward compatible, serviceType enumeration different than used today
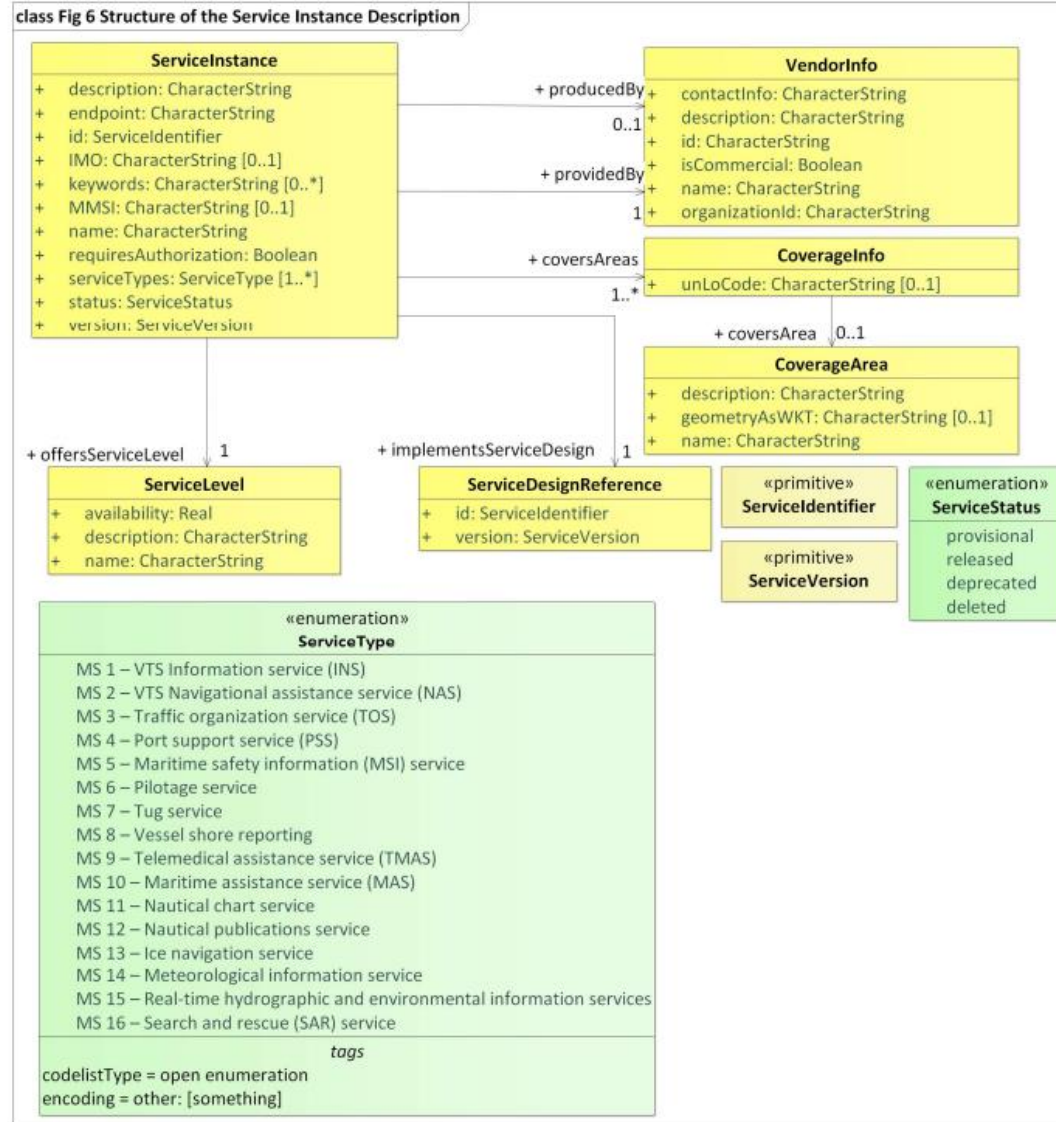
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G1128 v1.3

Figure 6   Structure of the Service Instance Description

Differences
- keywords: CharacterString -> CharacterString[0..*]
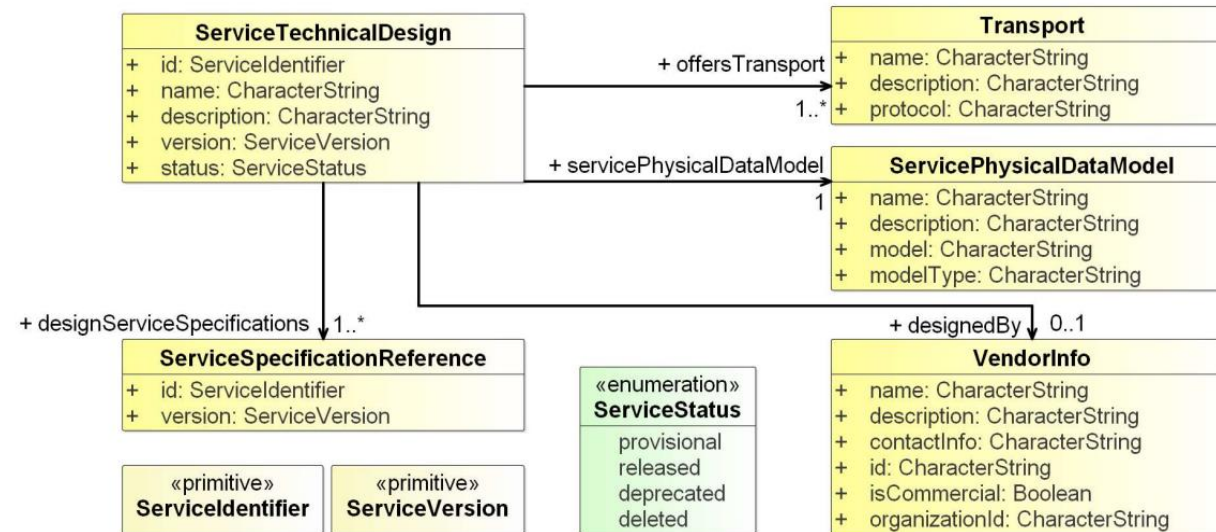- serviceType: CharacterString -> ServiceType[1..*]

G1128 v1.3

Figure 5   Structure of the Service Technical Design Description

Differences
- **<misses ServcieStatus="simulated" in the enumeration**

G1128 v1.3

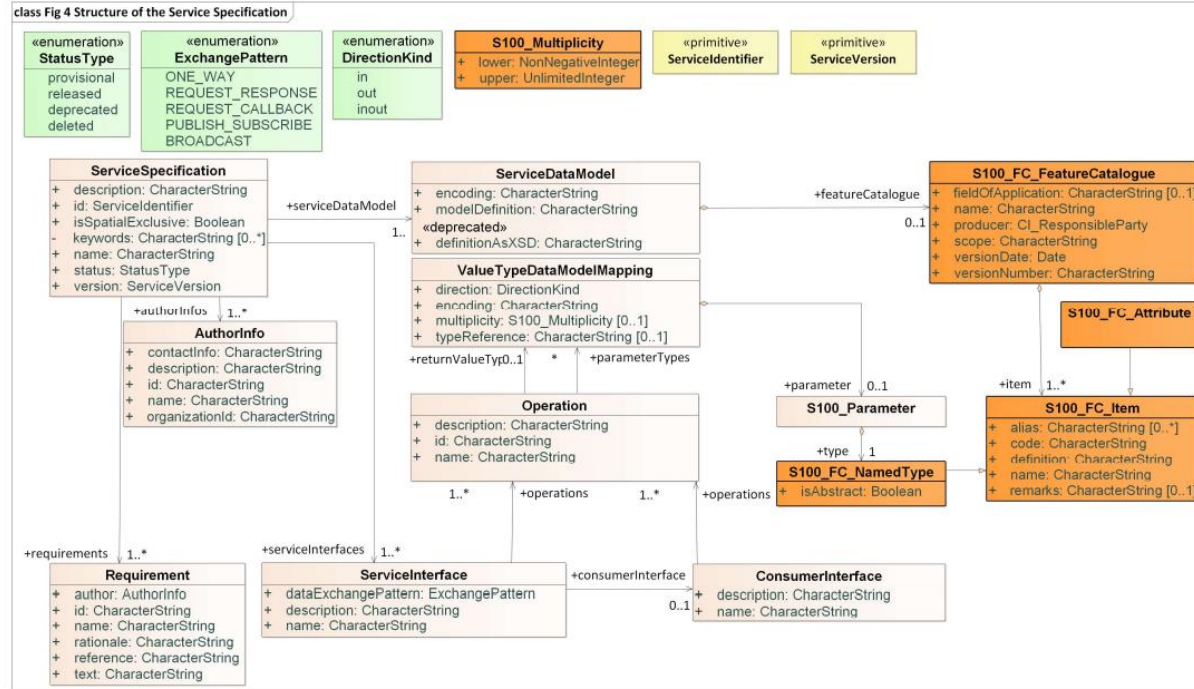## 3.3.   SERVICE SPECIFICATION XSD STRUCTURE

Figure 4   Structure of the Service Specification

Differences

- **DefinitionAsXSD deprecated**
- **NamedType added for reference to S100 S-product type and version**

serviceType

Enumeration serviceType		
Value	**Acronym**	**Definition**
Enhanced Monitoring	EMS,VTS,STC,SC	Used for shore center services such as VTS
Evaluation Service	EVS	Used for evaluation purpose services only
Fleet Office	FOS	Used for fleet office services
Fleet Operation	FOS	Used for fleet operation services
Hub	HUB	Used for hub services, such as EF-Hub
Inter-Port Synchronization	IPS	Used for inter-port synchronization services (port-port)
Navigational Warnings	NW,NWS	Used for navigation warning services
Pilot	PPU,Pilot	Used for pilot services, such as using Pilot Portable Unit (PPU)
Port	PORT,ETA	Used for port information services
Port Call Synchronization	PCS,PORTCALL	Used for port call synchronization services (ship - port)
Route Catalogue	RC,PRS	Used for route catalogue services, such as Pilot Routes, Reference routes
Route Crosscheck	RCS	Used for route cross check services
Route Optimization	ROS	Used for route optimization services
SAR	SAR	Used for search and rescue services, such as MRCC, JRCC
Ship Voyage Information	SHIP	Used for ships exchanging voyage and route information (today VIS for ship)
Winter Navigation	WNS	Used for winter navigation services
Area Management		TBD
Flow Management		TBD
UKCM	UKCM	Used for under keel clearance management services
Charts	CHART	Used for chart services
Reporting		

serviceType

MS 1 – VTS Information service (INS)
MS 2 – VTS Navigational assistance service (NAS)
MS 3 – Traffic organization service (TOS)
MS 4 – Port support service (PSS)
MS 5 – Maritime safety information (MSI) service
MS 6 – Pilotage service
MS 7 – Tug service
MS 8 – Vessel shore reporting
MS 9 – Telemedical assistance service (TMAS)
MS 10 – Maritime assistance service (MAS)
MS 11 – Nautical chart service
MS 12 – Nautical publications service
MS 13 – Ice navigation service
MS 14 – Meteorological information service
MS 15 – Real-time hydrographic and environmental information services
MS 16 – Search and rescue (SAR) service

tags

- Need to decide and harmonize use of field serviceType

Q&A

- Any Questions? The floor is open.

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Closing remarks

- New MCP release on DEV and TEST on 5:th Sept.

- Next Developer Forum the 15:th of Sept.
  - Also last day to give input before update to PROD!

- Implementation to PROD/Operational planned v.37, 16/9

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Meeting notes

- New MCP version released at DEV and TEST 5:th Sept. Preliminary implementation to PROD 16:th Sept.

- Ongoing development to use the latest G1128 schemas

- You are most welcome to send development suggestions to info@navelink.org

- Navigational warnings S-124 format: The S124 work group are working on two candidates for the service specification. One more conservative where all navigational warnings in selected nav area are sent, and another is to do a paradigm shift and have it more flexible by only sending the warnings relevant for your route.

  – A new meeting will be held in a few weeks time to discuss the candidates.

- Work and discussions are ongoing in the VTS Community for identifying the technical services in VTS

- Work is ongoing to write the service specification for Aids to navigate

- Navelink uses the G1128 Service Documentation schemas v1. These will now be updated to latest release. Discussion and work is also started in Navelink to harmonize STM "way" regarding service specification and service type with IALA G1128. This will hopefully enhance the harmonization and searchability of services.

  – In the next dev. forum we hope to have examples to present regarding G1128 and searchability.

  – The general idea is that we make a design for navigational warning based on a SECOM Template which then .e for technical interoperability.

  – The next release (that will be implemented in September 2022) will support both version of the G1128 schemas.

  – The schemas can be downloaded either by googling or by going to the Navelink Web Portal, How-To where you can find all schemas supported in Navelink, both G1128 and payload formats such as RTZ, S124, TXT.

- Next Developer forum at the 15:th September. Also last day to give input before update to PROD!

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Meeting notes